

IN THE CLAIMS

The following listing of claims will replace all prior versions, and listings, of claims in this application:

Claims 1-54 (Cancelled).

Claim 55 (New): An isolated DNA encoding a protein comprising the amino acid sequence of SEQ ID NO:4.

Claim 56 (New): An isolated DNA comprising SEQ ID NO:3.

Claim 57 (New): An isolated DNA comprising a polynucleotide which hybridizes under stringent conditions to SEQ ID NO:3, wherein the stringent conditions comprise washing in 2 X SSC and 0.1 % SDS at 60°C and wherein the polynucleotide encodes a protein having erythrose reductase type II activity.

Claim 58 (New): A cell, comprising the isolated DNA of Claim 55 such that the isolated DNA is capable of expressing a protein having erythrose reductase type II activity.

Claim 59 (New): A cell, comprising the isolated DNA of Claim 56 such that the isolated DNA is capable of expressing a protein having erythrose reductase type II activity.

Claim 60 (New): A cell, comprising the isolated DNA of Claim 57 such that the isolated DNA is capable of expressing a protein having erythrose reductase type II activity.

Claim 61 (New): A method for producing erythrose reductase type II, comprising cultivating the cell of Claim 58 in a medium to produce and accumulate erythrose reductase type II in a culture liquid, and harvesting the erythrose reductase type II from the culture liquid.

Claim 62 (New): A method for producing erythrose reductase type II, comprising cultivating the cell of Claim 59 in a medium to produce and accumulate erythrose reductase type II in a culture liquid, and harvesting the erythrose reductase type II from the culture liquid.

Claim 63 (New): A method for producing erythrose reductase type II, comprising cultivating the cell of Claim 60 in a medium to produce and accumulate erythrose reductase type II in a culture liquid, and harvesting the erythrose reductase type II from the culture liquid.

Claim 64 (New): A method for producing erythritol, comprising contacting the cell as claimed in Claim 58 with D-erythrose and harvesting the erythritol produced.

Claim 65 (New): A method for producing erythritol, comprising contacting the cell as claimed in Claim 59 with D-erythrose and harvesting the erythritol produced.

Claim 66 (New): A method for producing erythritol, comprising contacting the cell as claimed in Claim 60 with D-erythrose and harvesting the erythritol produced.